

Teaching portfolio

1. Teaching CV: A list of teaching and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD). Please state the teaching method used (e.g. lecture, class teaching, exercises, supervision, examination, coexamination, distance teaching, internet-based teaching and evaluation of teaching). Please also indicate the language of instruction.

Lecturing :

Bachelor level:

Fully taught and course responsible for the following courses:

o **Concept Design** (5ECTS), 3rd semester BA Art&Technology, AAU || format: lectures and a guided ideation workshop where students develop conceptual artworks as a mini-project || 2019-2024

Lectures focus on conceptual art, creativity methods, and theories about design thinking including design fiction and speculation and more-than-human worlds for the post-Anthropocene. We work with the book Dream Machines by Steven Connor, and during the course, students develop conceptual projects. Each semester, the focus of the dream machines changes according to an international competition or festival where I encourage students to submit their work.

o **Interaction Design** (5ECTS), 2nd semester BA Art&Technology, AAU || format: lectures || 2021-2024

The course introduces theories of interaction design as they relate to art and technology including histories of interactive digital art, types, and models of interaction across art, technology, and human-computer interaction, theories about participatory design and art, somaesthetics, and soma-based design and interactions.

o **Music and innovation** (5ECTS), 6th semester BA Musik, AAU || format: lectures || 2020-2024

The course introduces market analysis theories, tools and methods with a focus on creative entrepreneurship

o **Sketching** (1ECTS), 1st semester BA Art&Technology, AAU [Introduces analog and digital sketching methods for 2D and 3D drawing] || format: lectures+workshop || 2020-2024

o **Space, Art and Technology** (1ECTS), 2nd semester BA Art&Technology, AAU [covers spatial analysis methods. It introduces theories of space and place, as well as quantitative and qualitative methods for urban analysis as they can relate to public space art] format: lectures || 2020-2024

o **Digital Representation 1** (2ECTS), 2nd semester BA Art&Technology, AAU || format: workshop || 2019-2024

o **Digital Representation 2** (1ECTS), 3rd semester BA Art&Technology, AAU || format: workshop || 2020 - 2024

o **Digital Representation 3** (1ECTS), 4th semester BA Art&Technology, AAU || format: workshop || 2021 - 2024

[the Digital Representation mini-series introduces students to 3D modeling and digital fabrication, 3D character generation, and basic rigging and animation, VR/AR, computational design]

Taught lectures in:

o **Creative Entrepreneurship** (20ECTS), 6th semester BA Art&Technology || 2022-2024

o **Music Entrepreneurship** (20ECTS), 6th semester BA Music || 2019

o **Problem-based learning** (5ECTS), 1st semester BA Art&Technology, AAU || 2021-2023

Master level:

o **Technologies of experience design** (5ECTS), MA Media Arts Cultures, Erasmus Mundus Joint Master || 2020, 2024

Taught lectures in:

o MiL seminar, Master of IT and Learning, AAU || 2022Workshop:

o Introduction to digital fabrication, Msc Digitalization and Application Development, AAU

PhD level:

o Robots and Sustainability (3 ECTS) offered by the Department of Architecture, Design and Media Technology || together with: Elizabeth Jochum, Dimitris Chrystomomou, Markus Lochefeldt, Timothy Meritt, Matthias Rehm || format: lectures+workshop

Supervision: Supervised over 40 semester projects, bachelor projects and master theses:

1st semester BA Art&Technology, AAU || 2018-2024
2nd semester BA Art&Technology, AAU || 2019-2024
3rd semester BA Art&Technology, AAU || 2023
5th semester Bsc Mechanical Engineering, AAU || 2023

Bachelor projects:

BA Art&Technology, AAU || 2021-2024

Master thesis:

MA Media Arts Cultures, Erasmus Mundus Joint Master || 2023 (1 group), 2024 (2 groups)

Msc Medialogy, AAU || 2023 (1 group)

MA Interactive Digital Media, AAU || 2023 (1 group)

2. Study/programme administration and management: Experience in programme management and coordination. A list of study administration tasks, e.g. study board membership, chair of study board, semester or course coordinator, accreditation tasks, etc. Experience in planning teaching activities. Experience in programme development. Participating in committees and commissions etc. on education issues.

Member of the Art&Technology subcommittee, part of the **Arts, Health and Technology Study Board** || 2021-now

Semester coordinator of 2nd semester BA Art&Technology with the theme **Space, Art and Technology** || 2020-now

Course coordinator:

o Concept Design (5ECTS), 3rd semester, BA Art&Technology, AAU || 2020-now

o Interaction Design for Art and Technology (5ECTS), 2nd semester, BA Art&Technology, AAU || 2021-now

o Market Analysis for 6th semester BA Music, AAU || 2020 - now

3. Formal pedagogical training: A list of completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc. Written assessment from the course in university pedagogy for assistant professors. Participation in conferences on pedagogy and didactics. Please enclose any documentation of the above, such as course certificates, references, etc

University Pedagogy with a focus on Problem-Based Learning, AAU || 2021-2022

Course on University Pedagogy and Psychology, Technical University of Cluj-Napoca || 2015-2016

Authorized Rhino Trainer || McNeel&Associates, Barcelona || 2018-

4. Other qualifications: Conference contributions and attendance, contributions to debates, scientific articles on pedagogical issues etc. Peer supervision, editorials, mentoring

experience or other types of competence development activities.

2022-2023 Editing team for the special issue in the International Journal of PBL in Higher Education. Issue name: Weaving Hybrid Futures - Sustainability in Higher Educations with PBL Through Art, Science, and Robotics

Published papers based on educational curricula developed:

o Horvath, A-S., Rühse, V., & Raptis, D. (2020). SoundSculpt: A Design Framework for 3D Modelling and Digitally Fabricating Sound Patterns. In OzCHI 2020: 32nd Australian Conference on Human-Computer Interaction (pp. 572-581). Association for Computing Machinery. <https://doi.org/10.1145/3441000.3441017>

o Horvath, A-S., & Rühse, V. (2020). The Chladni Wall. In S. Constantine, A. Margherita, & N. Stavroula (Eds.), Communications in Computer and Information Science: HCII 2020 (Vol. 1294, pp. 390-397). Springer. Communications in Computer and Information Science Vol. 1294 https://doi.org/10.1007/978-3-030-60703-6_50

o Horvath, A-S, Jochum E., Löchtefeld M., K. Vissonova, T. Merritt (2023). Soft Robotics Workshops: Supporting Experiential Learning about Design, Movement, and Sustainability. In Cultural Robotics 2.0, Dunstan B., Tillmann D. (eds.) Springer (in Press)

Semester projects I supervised exhibited/acknowledged at international festivals:

REST (1st semester project, BA Art&Technology) - exhibited at **Copenhagen Light Festival 2020**
<https://copenhagelightfestival.org/lightworks-2020/>

Speculative Hybrids (master thesis, Msc Medialogy) > won the Future Trends and Prototypes award at the **Media Architecture Biennale (student awards)** > <https://studentawards.mediaarchitecture.org/mab/project/212>

Published work from semester projects or thesis supervised:

o Poulidou, P., Horvath, A. S., & Palamas, G. (2023). Speculative hybrids: Investigating the generation of conceptual architectural forms through the use of 3D generative adversarial networks. *International Journal of Architectural Computing*. <https://doi.org/10.1177/14780771231168229>

o Graungaard, A.K., Enghoff, A.E., Fogsgaard, J.L., Schmidt, L.K., Hansen, M.D. (2020). The Soundomat. In: Stephanidis, C., Antona, M., Na, S. (eds) HCI International 2020 – Late Breaking Posters. HCII 2020. Communications in Computer and Information Science, vol 1294. Springer, Cham. https://doi.org/10.1007/978-3-030-60703-6_48

5. Pedagogical development and research: Development of new courses, teaching materials, teaching methods, examination types or other types of pedagogical development. Didactic and pedagogical research. Cooperation with external collaboration partners.

2022 - 2024: Part of the ABRAx (Artificial Biology, Robotics and Art x) Erasmus Mundus Design Measures project. EU funded 15-month grant to develop curricula and submit an application for a joint Erasmus Mundus Master program. The program will offer two tracks, an MA and an Msc across Computational Biology, Art and Science. The work includes curricula development and accreditation of the new study at national levels and then at the European level. Consortium: Moholy-Nagy University of Art and Design (HU), Chalmers University (SW), Trento University (IT), Aalto University (FI)

2020-2023: Part of the ABRA (Artificial Biology, Robotics and Art) Erasmus+ project [strategic partnership meant to develop innovative transdisciplinary curricula across artificial biology, robotics and art towards sustainability]. Consortium: Institute for Advanced Design Studies (HU), Aalto University (FI), Aalborg University (DK), Trento University (IT)

2018-2019: Part of the We are the Makers Erasmus+ project [strategic partnership meant at developing innovative curricula for high schools across Europe. The curricula should use 3D printing and IoT to integrate STEM with art and

design towards STEAM]. Consortium: Create it REAL Aps (DK), Johannes-Kepler-Gymnasium(DE), E-nable(FR), Univ. Valahia, Targoviste (RO), Edumotiva (GR), Scuola di Robotica (IT)

6. References on your teaching skills from superiors or colleagues. Teaching evaluations and any teaching awards received.

2019 - Teacher of the year for BA Art and Technology, AAU

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogical development, plans for following up on student feedback/evaluations, etc. Personal reflections on your own pedagogical practice, including objectives, methods and implementation. This should include an analysis and a reasoned description of your pedagogical activities in relation to your pedagogical understanding and student learning. Thoughts on the teaching method at Aalborg University (which is largely based on group-organised project work and problem-based learning)

Type your answer here...

8. Any other information or comments.

Type your answer here...